IN THE CLAIMS:

Please cancel claims 1-21, without prejudice, and please add new claims 22-42 as follows.

Claims 1-21. (Cancelled).

22. (New) A method for generating unique internet protocol address from the geographical location data, in which the internet protocol address has a global prefix portion and a local suffice portion, wherein the geographical location information is coded in the suffix part of the address.

23. (New) A method according to claim 22, wherein the geographical location is a three dimensional coordinate.

24. (New) A method according to claim 22, wherein the geographical location information is a two dimensional coordinate.

25. (New) A method according to claim 22, wherein the geographical location information includes additional information.

26. (New) A method according to claim 25, wherein the additional information is node specific information such as terminal number, node name, node layer information, street address, serial number, color or weight.

27. (New) A method according to claim 22, wherein the address based on the geographic location information assigned to a mobile device is updated when the mobile device moves and said new address is informed to the register that controls the location of said mobile device.

28. (New) A method according to claim 22, wherein the address assigned to a mobile device consist of the device number and geographical location information of the router to which the mobile device is connected to.

29. (New) A method according to claim 22, wherein the geographical location information is automatically detected.

30. (New) A method according to claim 22, wherein the geographical information is manually entered.

31. (New) A method according to claim 22, wherein the addressing of subnets of the network is based on the geographic location of the routers.

32. (New) A method according to claim 22, wherein the addresses are used to improve the network performance by using the geographic location information in directing the radio signal to destination when radios are used in physical layer.

33. (New) A router for routing internet protocol packets in which the unique address is based on geographical location information and has a global prefix portion and a local suffix portion, wherein the system harnesses the geographic location information coded to the suffice portion of the address in routing packets to the destination nodes located in the subnetwork.

34. (New) A router according to claim 33, wherein the geographic location information is a three dimensional coordinate.

35. (New) A router according to claim 33, wherein the geographic location information is a two dimensional coordinate.

36. (New) A router according to claim 33, wherein the geographical location information includes additional information.

37. (New) A router according to claim 36, wherein the additional information is node specific information such as terminal number, node name, street address, serial number, color or weight.

38. (New) A router according to claim 33, wherein the router is arranged to update the address assigned to a mobile device when the mobile device moves.

39. (New) A router according to claim 33, wherein the router is arranged to assign to a mobile device an address which consists of a device number and a geographical location information of the router to which the mobile device is connected to.

40. (New) A router according to claim 33, wherein the router is arranged to query the geographic location information from the client attached to the network.

41. (New) A router according to claim 33, wherein the router is arranged to assign the geographic location information and terminal device number to client attached to the network.

42. (New) A router according to claim 33, wherein the router is arranged to utilize the geographic location information in directing the radio signal to destination when radios are used in physical layer.